

CLAIMS:

1. A data structure for defining a corresponding one of a plurality of logical surfaces on which graphics images are arranged, the data structure comprising a field indicating a color of the corresponding one of the logical surfaces, wherein at least one of the graphics images includes pixels having a single color, and wherein the pixels having the single color are generated at a display time using the color indicating field.

2. The data structure of claim 1, further comprising at least one of a field indicating a relative depth of the corresponding one of the logical surfaces on a display, a field indicating an alpha value for the graphics image on the corresponding one of the logical surfaces, a field indicating a location of the corresponding one of the logical surfaces on the display, a field indicating a location in memory where the graphics image for the corresponding one of the logical surfaces is stored, and a field indicating a format of the graphics image to be displayed on the corresponding one of the logical surfaces.

3. The data structure of claim 2, wherein the format of the graphics image is any one selected from a group consisting of YUV, RGB, CLUT and alpha-only formats.

4. The data structure of claim 3, wherein the alpha-only format is a format in which the graphics image is represented in the memory by alpha values only.

5 5. The data structure of claim 1, further comprising a field indicating a method of selecting an alpha value for each pixel in the graphics image on the corresponding one of the logical surfaces.

10 6. The data structure of claim 5, wherein the alpha value for each pixel is selected using chroma keying, CLUT alpha values, luminance (Y) values or a window alpha value.

15 7. The data structure of claim 2, wherein the alpha value contained in the field indicating the alpha value is applied to all pixels of the graphics image on the corresponding one of the logical surfaces.

20 8. A method of using a data structure to define a corresponding one of a plurality of logical surfaces on which graphics images are arranged, at least one of the graphics images including pixels having a single color, the method comprising:

indicating, in the data structure, a color of the corresponding one of the logical surfaces; and

25 generating the pixels having the single color for the at least one of the graphics images at a display time using the color of the corresponding one of the logical surfaces indicated in the data structure.

30 9. The method of claim 8, further comprising indicating in the data structure for the corresponding one of the logical surfaces, at least one of a relative depth on a display, an

alpha value for the graphics image, a location on the display, a location in memory where the graphics image is stored, and a format of the graphics image to be displayed.

5 10. The method of claim 9, wherein the format of the graphics image is any one selected from a group consisting of YUV, RGB, CLUT and alpha-only formats.

10 11. The method of claim 10, wherein the alpha-only format is a format in which the graphics image is represented in the memory by alpha values only.

15 12. The method of claim 8, further comprising indicating, in the data structure, a method of selecting an alpha value for each pixel in the graphics image on the corresponding one of the logical surfaces.

20 13. The method of claim 12, wherein the alpha value for each pixel is selected using chroma keying, CLUT alpha values, luminance (Y) values or a window alpha value.

25 14. The method of claim 9, further comprising applying the alpha value for the graphics image to all pixels of the graphics image on the corresponding one of the logical surfaces.

15. A method of displaying a graphics image including pixels having a single color, comprising:

generating a plurality of data structures, each data structure defining a corresponding one of a plurality of windows on which graphics images are displayed; and

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generating the pixels having the single color at a display time instead of reading the pixels from memory.

16. The method of claim 15, wherein at least one of the
5 data structures includes a field indicating a color of the graphics image, and wherein the color indicating field is used to generate the pixels.

17. The method of claim 15, further comprising sorting the
10 data structures in accordance with an order in which the corresponding windows are displayed.

18. The method of claim 17, wherein each of the data structures has a field indicating a relative depth of the
15 corresponding one of the windows, which is used to sort the data structures.

19. The method of claim 15, wherein at least one of the data structures includes a field indicating an alpha value for
20 the graphics image on the corresponding one of the windows.

20. The method of claim 15, wherein at least one of the data structures includes a location of the corresponding one of the windows on a display.